



MDC Resource Science

Who's Shooting?

A User Survey of MDC's Unstaffed Ranges

Science Notes



Who's Shooting? MDC's Unstaffed Ranges

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Information Need:

In addition to 5 staffed Shooting and Outdoor Education Centers, The Missouri Department of Conservation (MDC) manages 69 areas with unstaffed shooting ranges across Missouri that provide various kinds of shooting opportunities including: archery, rifle, handgun, and shotgun opportunities. But MDC knew virtually nothing about the people who use MDC's unstaffed ranges, their needs and desires, and their compliance with rules and regulations.

Results:

From 2013 to 2015, MDC undertook a 3-stage project to: 1) create a GIS data layer of all shooting ranges across Missouri; 2) survey key MDC staff; and 3) conduct public use surveys at unstaffed ranges.

Highlights include:

- Over 89% of Missourians live within 30 minutes of a firearms range (of any ownership). About 51% live within 30 minutes of a MDC firearms range.
- Area Managers reported three common rule violations leading to some of the biggest problems: littering, including use of unauthorized targets (often on the ground); improper firearm use; and vandalism.
- Area Managers reported that having:
 - ◆ A recently renovated or "cleaned up" range was generally thought to improve public behavior and diminish the trash issue especially.
 - ◆ A local group that thought "ownership," whether or not there was an official agreement, also helped with behavior issues.
 - ◆ Increased MDC (especially Conservation Agent) presence was universally seen as helpful – at least during the time that MDC staff was onsite.
- An estimated 299,810 visitors, in 171,423 parties, used 39 unstaffed ranges during 2015, with about 1.5 visits per visitor per year. (See Table 1.)
- Missourians made up 95% of the visitors. Most shooters were male (84%); and most were adults (92%). Over 60% of users had purchased a hunting license.

- MDC's unstaffed ranges provided over \$1.8 million in economic benefits (consumer surplus) to the users. The estimated economic impact on Missouri's economy of spending associated with use at MDC ranges is \$7.3 million.

Using the Information:

Information gathered in this study will prove helpful in better managing (i.e., designing, maintaining, and operating) unstaffed ranges, meeting public needs, and

Table 1 – Selected results from the on-site visitor use survey at 39 MDC unstaffed shooting ranges.

	Estimate	(+/-)
Exits (people)	299,809.9	28,833.9
Unique visitors	196,810.1	13,625.9
Exits (parties)	171,422.9	11,077.7
Avg. party size (people)	1.8	0.2
Avg. visits per visitor per year	1.5	0.2
Avg. time at range (hours)	1.2	0.1
Avg. distance traveled to range (miles)	23.7	3.7

remaining compliant with Federal Aid guidelines. Other uses include: assessing the need for additional ranges; evaluating the potential for "staffing" with part-time employees or vendors on unstaffed ranges; providing accountability for the management and regulation of existing ranges; highlighting safety issues; better understanding user compliance with range regulations; and quantifying the opportunities provided by MDC and other ranges within a specific geography. The range-by-range visitor numbers and characteristics can be used to develop a range priority list for range maintenance and improvements and range renovation/construction projects, help with any range rule changes, and improve customer service and safety.

Special thanks to 4-H and the 4-H Foundation, our partners in the on-site survey. Full results are available at: http://dslsrv8.cs.missouri.edu/~nc5ff/ShootingRangeWebsite/MDC_Shooting_Range/index.php

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